

PISTON ENGINE ASSEMBLY

Abstract of the Disclosure

A variable compression piston assembly includes a plurality of pistons, a transition arm coupled to each of the pistons, and a rotating member mounted for pivoting movement to slide along an axis of the drive member. Movement of the rotating member relative to the drive member changes the compression ratio of the piston assembly. An engine assembly includes first and second piston assemblies mounted back-to-back and 180° out of phase. A joint for positioning between first and second pistons includes an outer member and an inner member. The outer member is configured for movement relative to the pistons along a first axis perpendicular to the common axis of the pistons. The inner member is mounted within the outer member for rotation relative to the outer member about a second axis perpendicular to the first axis and the common axis.

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